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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/117,357	09/22/1998	KLAUS STOCKEMANN	SCH1655	3601

7590 10/04/2006

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EXAMINER	
ZHANG, NANCY L	
ART UNIT	**PAPER NUMBER**
1614	

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/117,357	STOCKEMANN ET AL.	
	Examiner	Art Unit	
	Nancy L. Zhang	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-14,20,30,33-36,40,42-47 and 51-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-14,20,30,33-36,40,42-47 and 51-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicants' amendment filed on 2/27/2006 has been received and entered.

In view of applicants' amendment, the objection to claims 42-43 for being dependent from a cancelled claim and the object to claims 34 and 53 for being substantial duplicate of one another is hereby withdrawn.

Applicants' argument regarding the support for "combinations of LHRH analogues" in the specification is found persuasive. Accordingly, the rejection of claim 35 under 35 USC § 112, first paragraph as lack of written description is hereby withdrawn.

Applicants' argument regarding the support for "separate administration of LHRH analogues and Raloxifen" in the specification is found persuasive. Accordingly, the rejection of claim 44-47, 52, 54 under 35 USC § 112, first paragraph as lack of written description is hereby withdrawn.

Claims 11-14, 20, 30, 33-36, 40, 42-47 and 51-54 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

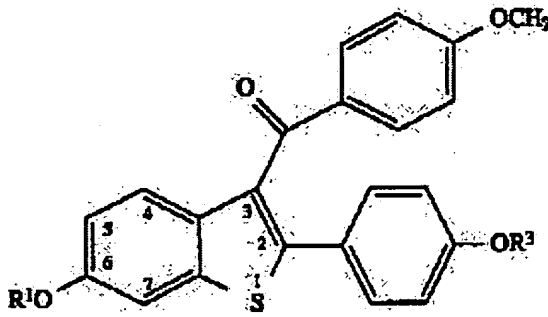
> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11-14, 20, 30, 33-36, 40, 42-47 and 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cullinan et al. (US Patent 5,593,987; issued date: Jan. 14, 1997; filed date: Dec. 21, 1993) in view of Devogelaer et al.("LHRH analogues and bone loss", Lancet, June 27, 1987, 1(8548): 1498).

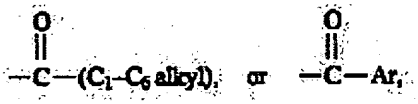
Applicants' invention as claimed in claims 11-14, 20, 30, 33-36, 40, 42-47 and 51-54 is directed to a method for ameliorating LHRH analogue-induced reduction in bone density in a patient by administering to the patient an effective amount of 6-hydroxy-2-2(4-hydroxyphenyl)-3-[4-(2-piperidinoethoxy)-benzoyl]benzo[b]thiophene or a hydrochloride salt of which is Raloxifen.

Cullinan et al. disclose a method of inhibiting breast disorders by administering to a human in need of treatment an effective amount of a compound having the formula



(I)

wherein R^1 and R^3 are independently hydrogen, $-CH_3$



wherein Ar is optionally substituted phenyl;

R^2 is selected from the group consisting of pyrrolidino, hexamethyleneamino, and piperidino; or a pharmaceutically acceptable salt of solvate thereof.

(see abstract). Raloxifene is the hydrochloride salt of a compound of formula (I) where R^1 and R^3 are hydrogen and R^2 is 1-piperidinyl (column 2, lines 31-33). The patient population in Cullinan's Test Assay 1 is women (column 6, line 29) and the amount of drug administered is 20-200 mg per day by the oral route.

Cullinan et al. do not teach that the method of administering Raloxifene can be used to ameliorate LHRH analogue-induced reduction in bone density in a patient. However, Cullinan et al. disclose that Raloxifene activates the same genes as estrogen does and displays the same pharmacology for osteoporosis as estrogen does (column 2, lines 40-42). Meanwhile, it is known that LHRH analogues treatment may have the consequences of long term oestrogen deficiency on bone mass (Devogelaer et al., page 1498, left column, last paragraph). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to administer Raloxifene at

the same time of or after the administration of LHRH analogues to a patient in order to ameliorate the bone density reduction caused by administering LHRH analogues. The motivation to do so is provided by Devogelaer et al. that the administration of LHRH may have risk of osteoporosis and provided by Cullinan that Raloxifene has the pharmacology for osteoporosis.

Therefore, the invention as claimed in claims 11-14, 20, 30, 33-36, 40, 42-47 and 51-54 was *prima facie* obvious over the combined teachings of Cullinan et al. and Devogelaer et al.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nancy L. Zhang whose telephone number is (571)-272-8270. The examiner can normally be reached on Mon.- Fri. 8:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571)-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

nlz 9/29/06

NLZ

Ardin H. Marschel 9/29/06

ARDIN H. MARSCHEL
SUPERVISORY PATENT EXAMINER